



# Ball valve brass threaded female with pneumatic actuator single & double acting



Actuated Brass WRAS Approved Ball Valve fitted with pneumatic Actuator

Ball Valve:

Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite or equivalent thread sealant

ISO 5211 and DIN 3337 mounting flange for universal connection to actuator

Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Assessment according to Pressure Equipment Directive 97/23 CE module B+D by Pascal (1115)

EN 10226-1, ISO 228 parallel female by female threads

Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

Working Pressure 40 Bar (600 PSI) up to 2", 30 Bar (450 PSI) over 2" non-shock cold working pressure

Working Temperature -20°C (-4F) to +170°C (+350F)

Warning: freezing of the fluid in the installation may severely damage the valve

Actuator: Haitima Double & Single Acting Pneumatic Actuator

**Aluminium Body** 

All sized Based on 6 Bar Pilot Air Pressure





# Full port 1/2"-4" hot forged brass ball valve















# **Quality:**

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- · No metal-to-metal moving parts
- · No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life

## **Body:**

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

#### Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

#### **Sealing:**

 Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

#### Threads:

• EN 10226-1, ISO 228 parallel female by female threads

# Flow:

• 100% full port for maximum flow

#### **Handle:**

 Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See *RuB* line of electric and pneumatic actuators.

### **Working pressure and temperature:**

- 40 Bar (600 PSI) up to 2", 30 Bar (450 PSI) over 2" non-shock cold working pressure
- For use with dangerous fluids pressure rating is 5 bar
- -20°C (-4°F) / +170°C (+350°F)
- **WARNING**: freezing of the fluid in the installation may severely damage the valve
- For use with dangerous fluids temperature rating is -20°C +60°C

#### **Options:**

- s.64 configuration featuring NPT taper ANSI B.1.20.1 female by female threads, unplated body, reinforced seats and brass or stainless stem and ball
- CW511L brass (lead-free and DZR) for drinking water applications with compression ends
- Configuration for use with slurries or liquid bearing abrasive
- Rack and pinion pneumatic actuator (spring return or double
- Compact power electric actuator for some sizes
- Manual lockable handle

# **Upon request:**

• Custom design

#### **PED directive:**

 Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by Pascal (1115)

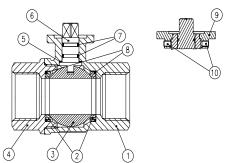




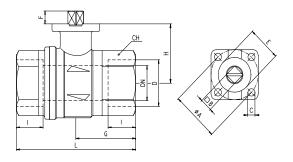
# Approved by or in compliance with:

- Water Regulations Advisory Scheme (United Kingdom)
- · GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: approvals apply to specific configurations/sizes only.



Valves configuration up to 2"

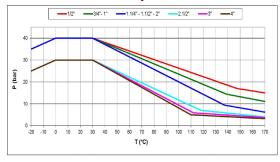


Valve ball seats and stem configuration of valves over 2" is different.

# Torque for actuator sizing N.m

Delta P →	0 ÷ 15	Bar	40 Bar				
			(30 Bar over 2")				
Valve size	To	To	To	To			
	open	close	open	close			
1/2"	2,8	1,7	2,8	1,7			
3/4"	3,8	2,3	3,8	2,3			
1"	7,1	4,2	7,1	4,2			
1.1/4"	11,7	12,6	13,6	12,6			
1.1/2"	24,9	20,3	30,9	20,3			
2"	29,6	25,1	37	25,1			
2.1/2"	42	42	105	105			
3"	102	102	120	120			
4"	186	186	225	225			

#### **Pressure-temperature chart**



	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Ball seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Black anodized flange (only from 2.1/2" to 4")	1	Aluminum
10	Grub Screw (only from 2.1/2" to 4")	2	CB4FF

D (inch)	1/2	3/4	1	1 1/4	1 1/2	2	21/2	3	4	
DN(mm)	15	20	25	32	40	50	65	80	100	
I (mm)	15.5	18	21	23	24.5	26.5	32	35	41.5	
L (mm)	75	80	90	110	120	140	156	177	216	
G (mm)	30.5	37	45.5	52	59 67.		78	88.5	108	
H (mm)	31	38.5	42.5	55.5	62	69	89	96	111	
CH(mm)	27	32	41	50	55	70	85	99	125	
ØA(mm)	36	36	36	50	50	50	70	70	70	
□B(mm)	9	9	9	11	11	14	17	17	17	
C (mm)	5.6	5.6	5.6	6.6	6.6	6.6	8.5	8.5	8.5	
E(mm)	25	25	25	35	35	35	55	55	55	
F(mm)	7.5	8.5	8.5	10	10	14.5	18	18	18	
Flange connection DIN ISO 5211 DIN 3337	F03	F03	F03	F05	F05	F05	F07	F07	F07	

Ball valves are marked CE on end-cap from 1.1/4" to 4" as follow: CE 1115 cat IIIB+D PS: 5 GAS TS1:  $-20^{\circ}$ C TS2:  $+60^{\circ}$ C

# **Torque correction factors**

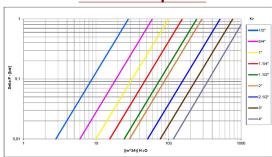
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors.

Lubricating oils or liquids 0.8
Dry gases, natural gas, superheated steam 1.5
Slurries or liquids bearing abrasive particles 1.5÷2.5

Ask for additional information on the whole range of **RuB** products and consult with your supplier for special applications.

## Pressure drop chart



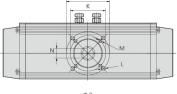


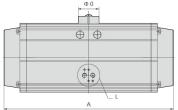


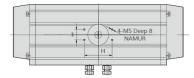
# Haitima Double Acting Aluminium Pneumatic Actuator



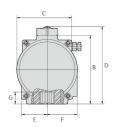
















# **Features**

- 0-90° rotation angle to pilot ball, butterfly and plug valves
- Double acting torques from 9 to 3916 Nm at 6 bar
- Hard anodized aluminium body
- ATEX EXII2GdCT certification
- NAMUR pneumatic connection for solenoid valve installation
- Working temperature: -20°C to +90°C
- Maximum working pressure: 8 bar

Model (HTD)	Nm
032	9
040	14.1
052	25
063	43.9
075	70.5
083	89.1
092	136.4
105	203.6
125	349.8
140	526.4
160	802.2
190	1292.9
210	1776.7
240	2785
270	3916.3

Model (HTD)	Α	В	С	D	Е	F	G	Н	1	J	К	L	М	N	0	Air Connection
032	112	45	51	71	22.5	28.5	12	50	25		F03/¢36		M5x8	9	¢40	1/8"
040	124	59.5	83	86	36.4	24	14	80	30	F05/¢50	F03/¢36	M6x9	M5x8	11	¢40	1/4"
052	163.5	72	65	98	26	42	14	80	30	F05/¢50	F03/¢36	M6x9	M5x8	11	¢40	1/4"
063	181	87.6	71	113	33	47	18	80	30	F07/¢70	F05/¢50	M8x10	М6х9	14	¢40	1/4"
075	207	99.4	80.2	125	38.7	52.5	20	80	30	F07/¢70	F05/¢50	M8x12	М6х9	14	¢40	1/4"
083	213	108.9	91.6	134.5	40	56.5	21	80	30	F07/¢70	F05/¢50	M8x12	М6х9	17	¢40	1/4"
092	258	117	98.3	143	44	59	21	80	30	F07/¢70	F05/¢50	M8x12	M6x10	17	¢40	1/4"
105	287	133	109.5	158.5	52	64	24.5	80	30	F10/¢102	F07/¢70	M10x15	M8x12	22	¢40	1/4"
125	342.5	154.4	127.2	180.5	59.7	74	29	80	30	F10/¢102	F07/¢70	M10x15	M8x12	22	¢50	1/4"
140	411	173.7	138	200	65	77	32	80	30	F12/¢125	F10/¢102	M12x20	M10x15	27	¢60	1/4"
160	488	198	158.3	224	73.8	86.7	34.5	80	30	F12/¢125	F10/¢102	M12x20	M10x15	27	¢60	1/4"
190	544	232.3	188.7	258	85.3	102.8	40	130	30	F14/¢140		M16x22		36	¢80	1/4"
210	580	257.6	210.5	284	96.5	113.2	41	130	30	F14/¢140		M16x24		36	¢80	1/4"
240	622	291	245	317	115	130	50	130	30	F16/¢165		M20x26		46	¢80	3/8"
270	766	330	273	356	126	147	50	130	30	F16/¢165		M20x26		46	¢80	1/2"

Rev. 1

Subject to change without notice